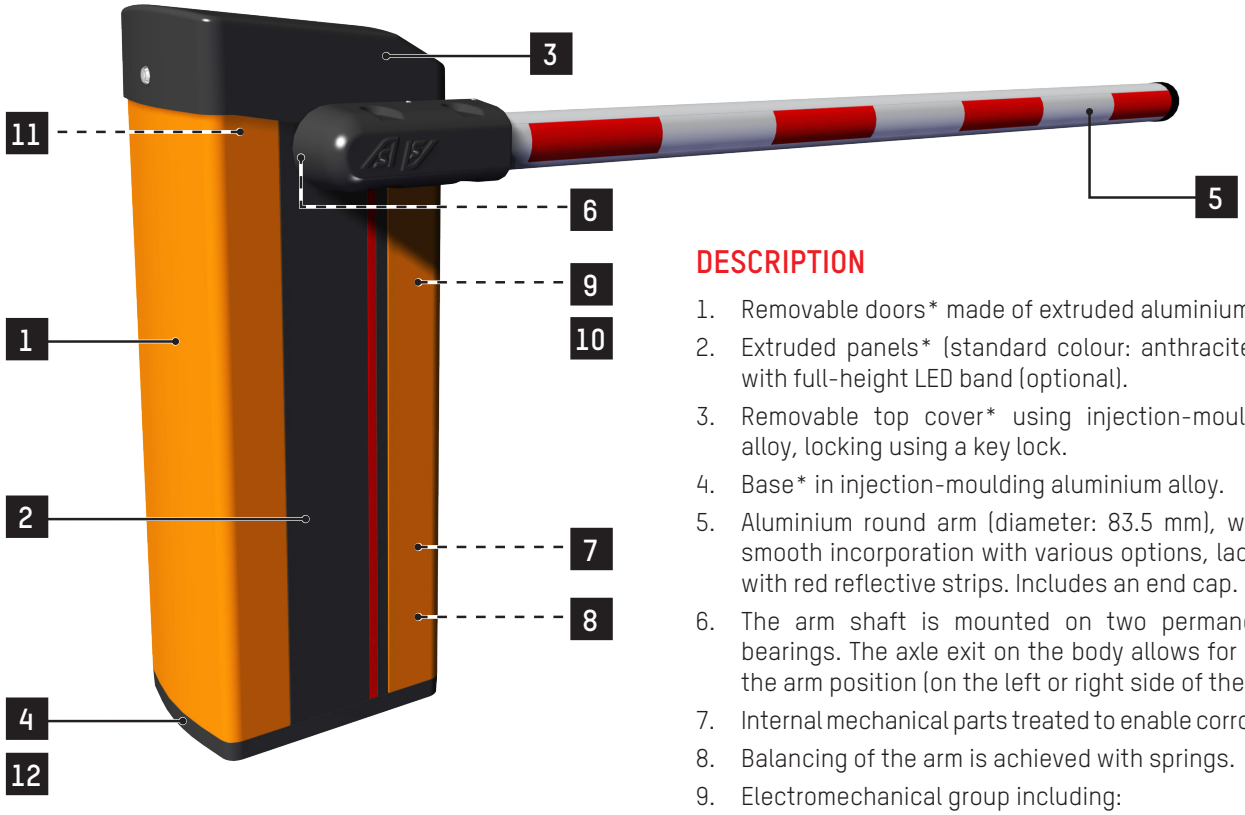
BL AS1

Technical Data Sheet

Rev. 00 • Updated 01/2026



The **AS1** lift barrier is a universal barrier, its high performance and high level of operational safety allowing it to cover a wide range of applications: traffic management, parking areas, industrial sites and toll roads.

The AS1 range offers exceptional durability and reliability thanks to its corrosion-resistant aluminium base, light yet robust design, and IP55 protection against dust and water.

The AS1 barrier is flexible and can be customised to meet various requirements. Up to seven metres in length, with built-in LED lighting options, and a choice of standard or custom (RAL) colours, it can adapt to all applications and integrates perfectly with your environment while enhancing safety.

STANDARD RAL COLOURS

RAL 2000 (*)	RAL 3020	RAL 7016	RAL 9010
Orange	Red	Anthracite grey	White

(*) Standard color.
All other colors must be specified when ordering.

Note: These RAL references are available free of charge.

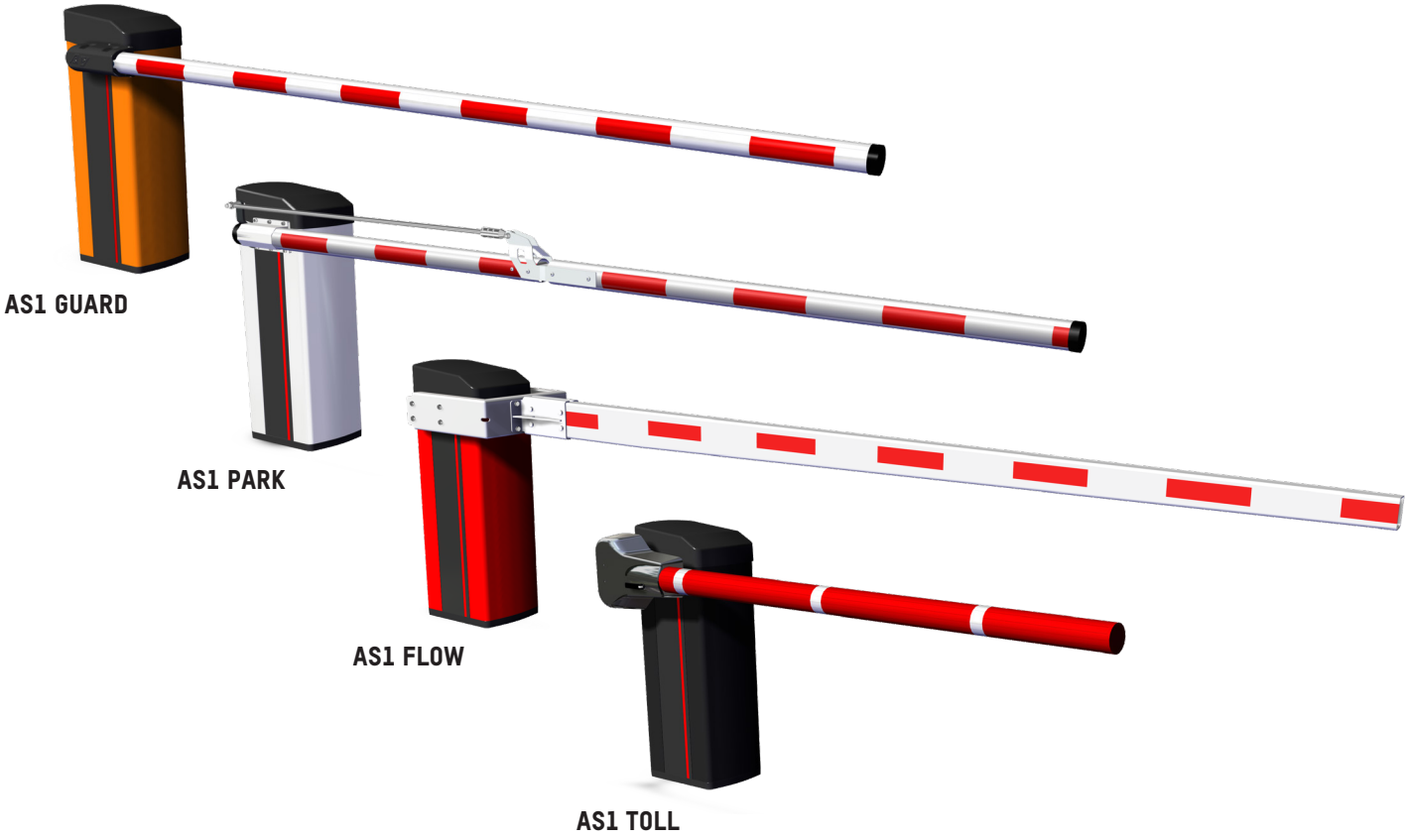
DESCRIPTION

1. Removable doors* made of extruded aluminium.
2. Extruded panels* (standard colour: anthracite grey RAL7016) with full-height LED band (optional).
3. Removable top cover* using injection-moulding aluminium alloy, locking using a key lock.
4. Base* in injection-moulding aluminium alloy.
5. Aluminium round arm (diameter: 83.5 mm), with grooving for smooth incorporation with various options, lacquered in white with red reflective strips. Includes an end cap.
6. The arm shaft is mounted on two permanently-lubricated bearings. The axle exit on the body allows for easy reversal of the arm position (on the left or right side of the housing).
7. Internal mechanical parts treated to enable corrosion resistance.
8. Balancing of the arm is achieved with springs.
9. Electromechanical group including:
   - Brushless DC motor.
   - Secondary transmission through a connecting rod - crank system, ensuring perfect mechanical locking in both extreme positions.
   - Automatic re-lifting of the arm in case of a power cut (optional).
10. Manual release lever in the event of a power cut.
11. Configurable electronic control logic that supports various control options and/or additional accessories.
    - Ethernet and USB-C ports
    - Adjustable information contacts:
      - Showing barrier position status (open or closed)
      - Showing the status of the presence sensors
      - Enabling master-slave control for 2 opposite barriers (one barrier's movement is controlled by the other barrier)
12. Base compatible with the relevant range of Automatic Systems barriers.

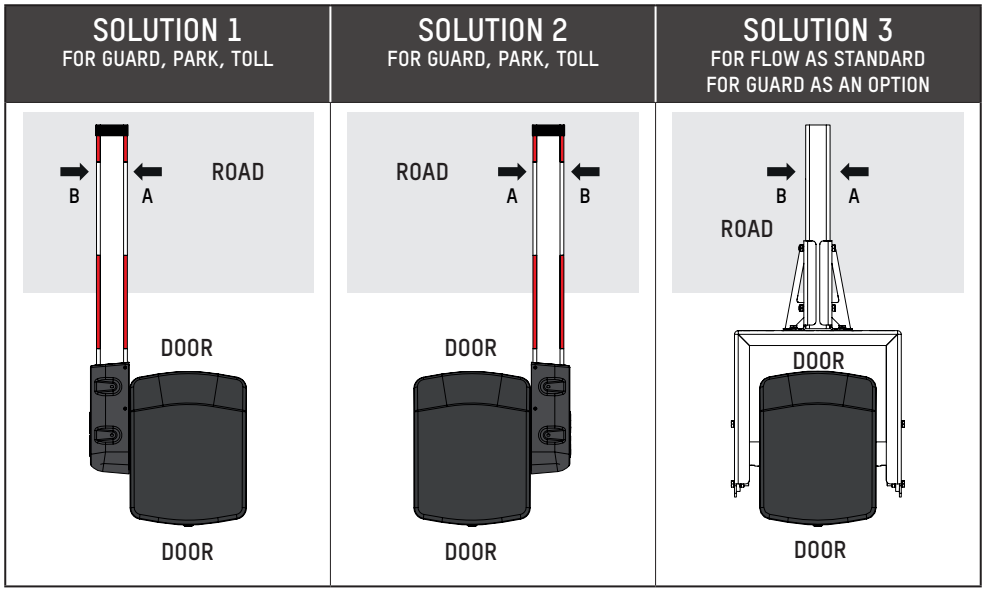
*Outer shell is made entirely of aluminium, ensuring optimal corrosion resistance in accordance with the requirements of the Qualicoat label.

The new range of barriers spans **4 categories**:

- **AS1 Guard:** a solution to secure sites with widths of up to 7 metres. Equipped with a more powerful engine. Perfect for environments requiring reliability and robustness.
- **AS1 Park:** the ideal solution for car parks, with standard or articulated arm options.
- **AS1 Flow:** designed for traffic management to ensure smooth and safe operations in high-traffic areas. The barrier is equipped with a white calliper featuring fibreglass or aluminium arm.
- **AS1 Toll:** specially designed for motorway tolls. Can be equipped with a Protecta® carbon arm with manual swing-off system, automatic re-hinging device at the back side or on the front side.



CONFIGURATIONS



STANDARD TECHNICAL FEATURES

Power supply	Single-phase 230/110 V 50/60 Hz with ground. [1]			
Consumption	Maximum 500 W (Nominal 60 W)			
Type of arm	Round in aluminium, tube Ø83.5 with grooving.			
Ambient operating temperature	Between -20 and +60°C. (with no heating option)* *Up to -45°C (with heating option)			
Ambient relative humidity	max 95%, without condensation			
	AS1 Park	**AS1 Guard**	**AS1 Flow**	**AS1 Toll**
Clear opening (L) [4]	From 2 to 4 m	From 2 to 7 m	From 2 to 7 m	From 2 to 4 m
Minimum opening/closing time	Adjustable between 1.2 and 4 seconds, according to **2 distinct profiles**: • Standard [2] • Fast [3]			Adjustable from 0.7 seconds: • Fast [3]
Motor	20 Nm brushless geared motor	60 Nm brushless geared motor		
Weight (without arm)	+/- 62 kg	+/- 65 kg		
MCBF (Mean cycles between failures)	**10,000,000** cycles, if servicing recommendations are followed			
Protection index	IP55			
Noise level	<70db(A) [5]			
CE	Compliant with European standards			

1 Do not connect to an isolated ground network or to an industrial distribution network with high impedance ground.
2 Standard speed - Impact force complies with EN 12453 standards.
3 Fast speed - The installer must ensure that the installation complies with the standard, such as by using the 'dead man' switch.
4 For passages over 5 metres, a standard tip support has been added to the end of the arm for added stability.
5 Measured 1 metre from the machine's surface and at a height of 1.60 meters above the ground, in accordance with ISO 3744. No ear protection needed.

WORK TO BE CARRIED OUT BY THE CLIENT

- Floor attachment suited to type.
- Power supply.
- Wiring for potential external peripherals.

Note: please follow the installation plan.

OPTIONS

S Standard
● Optional

	AS1 GUARD	AS1 PARK	AS1 TOLL	AS1 FLOW
ARMS				
Folding rigid aluminium skirt.	●			
Adjustable articulated round arm (up to 4m). [1]	●	●		
Back round arm swing-off (Ø 83.5 mm) (swinged-off arm detection device included) up to 4 m.	●	●	S	
Rubber protective profile.	●	●	●	●
ASO safety edge (with protection) under aluminium arm (for faster speed according to EN 12453).	●	●		
Carbon Protecta® arm. [2]			●	
Automatic opening of the arm in case of a power failure (AVR).	●	●	S	
Limit switch for info - Arm position in case of power failure.	●	●	●	●
Semi-reinforced aluminium oval (175 x 60mm) arm with stirrup.	●			
Automatic arm re-hinging device + carbon Protecta® arm (2.5m, 3m, 3.5m).			●	
Articulated round arm (from 2 to 4 m inclusive).	●	●		
Articulated round arm (5 m).	●			
TIP SUPPORTS				
Height-adjustable tip support.	●	●		
Eletromagnetic tip support (up to 5 m inclusive) - arm Ø80 mm, Ø83.5 or Ø84 mm.	●	●		
Electrolocked tip support.	●	●		
Articulated tip support (up to 5 m inclusive). [3]	●	●		
SECURITY & PROTECTION				
Rotating base (alternative to swing off device) - 1 position sensor.	●			
Rotating base with reporting of information on the housing position (2 position sensors).				●
Opening protection of both cover & door - Information by a dry contact. • Standard: Info sent back to terminal block without action	●	●	●	●
CONTROL AND COMMAND				
Fireman emergency opening embedded in the hou7sing (11 mm spanner wrench).	●	●	●	●
Integrated break-glass box on the housing.	●	●		
Programmable clock - Weekly or yearly (locked open during a period of time). [4]	●	●	●	●
Key switch on the housing (automatic/locked open/locked closed).	●	●	●	●
Radio transmitter - 2 channels.	●	●	●	●
Radio receiver - 2 channels + antenna. [5]	●	●	●	●
Radio transmitter - 4 channels.	●	●	●	●
Radio receiver - 4 channels + antenna. [5]	●	●	●	●
Terminal block in the lower part.	●	●	●	●
Presence sensor on rail - Single or double channel.	●	●	●	●
Photo-electric cell - Transmitter / Receiver or Reflex.	●	●	●	●
Support post for photo-electric cell (H = 1m).	●	●	●	●
Ultrasonic detector installed in the housing under the arm (protection cover included). [6]	●	●	●	●
Ultrasonic detector on the housing under the arm (protective cover included). [6]	●	●	●	●
Input/output (I/O) extension board for Phoenix logic.	●	●	●	●
Number plate recognition integration kit (ANPR/SURVISION) without camera. [7]	●	●	●	●
Totaling counter (number of vehicle operations).	●	●	●	●
Totaling counter with resetting.	●	●	●	●

S Standard
● Optional

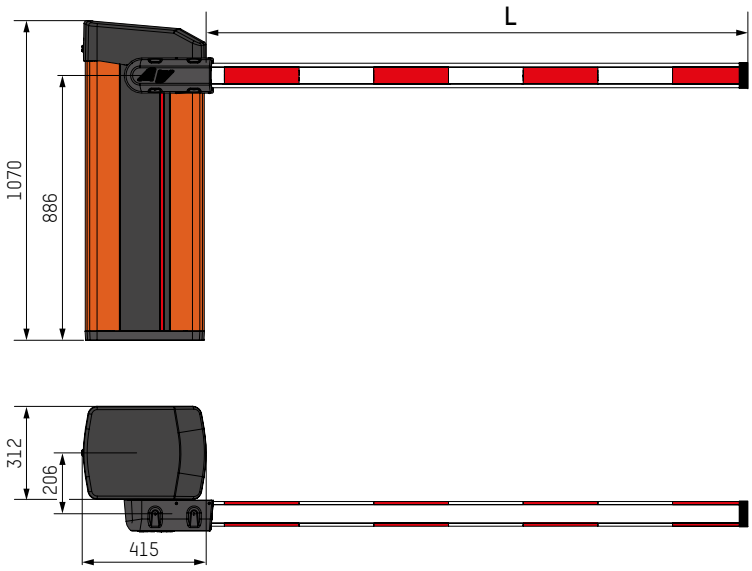
	AS1 GUARD	AS1 PARK	AS1 TOLL	AS1 FLOW
Laser sensor - on post. [8]	●	●	●	●
Laser sensor - fixed on barrier housing. [9]	●	●	●	●
Double laser sensor - fixed on barrier housing. [10]	●	●	●	●
Remote control for laser sensor.	●	●	●	●
Reference point for laser sensor fixed on post. [8]	●	●	●	●
Reference point for laser sensor fixed on tip support. [8]	●	●	●	●
Virtual loop radar detector - CAT security. D.	●	●	●	●
Virtual loop radar detector with vandal-proof housing - CAT.D Security .	●	●	●	●
Offset arm in RAL7016 for virtual loop radar detector.	●	●	●	●
SIGNALIZATION				
LEDS on arm - Per pair (flashing lights (red) when closed).	●	●	●	●
Traffic lights (Ø 100 mm or Ø 200 mm) - Red/green LEDs - Fixed on a support post on the barrier.	●	●		
Traffic lights (Ø 200 mm) - Orange LEDs - Fixed on a support post on the barrier.	●	●		
Traffic lights (Ø 200 mm) - Red/Green LEDs + acoustic and visual alarms - Fixed on a support post on the barrier.			●	
Traffic lights (Ø 180 mm) R2 - Orange LED - Fixed on the arm.				●
Traffic lights (Ø 300 mm) R24 - Red - Fixed on a support post on the barrier.				●
Relays for traffic lights in 230/110V.	●	●	●	●
Acoustic alarm 100dB (internal mounting) during the barrier closing movement.	●	●	●	
Acoustic alarm 105dB (Ø 265mm) - G2 type (external mounting).				●
Aluminium composite traffic sign (Ø 300 mm).	●	●		
Aluminium traffic sign (Ø 450 mm). Class II.				●
LED flashing light on the cover. [11, 12]	●	●	●	●
Integrated LED strip on rail under the arm.	●	●	●	●
Function pictogram - Integrated in the housing	●	●	●	●
AESTHETICS				
Non standard colour - Monocolour.	●	●	●	●
Raised base (60mm-thick in RAL9005 painted steel). [13]	●	●	●	●
Customer logo.	●	●	●	●
POWER SUPPLY				
Power supply 120V - 50/60Hz.	●	●	●	●
ENVIRONMENT				
Thermostatic heating - Heating for operation until -35°C.	●	●	●	●
Cooling kit (frequency inverter & housing door). [14]	●	●	●	●

Note: for all restrictions related to the options, please contact us.

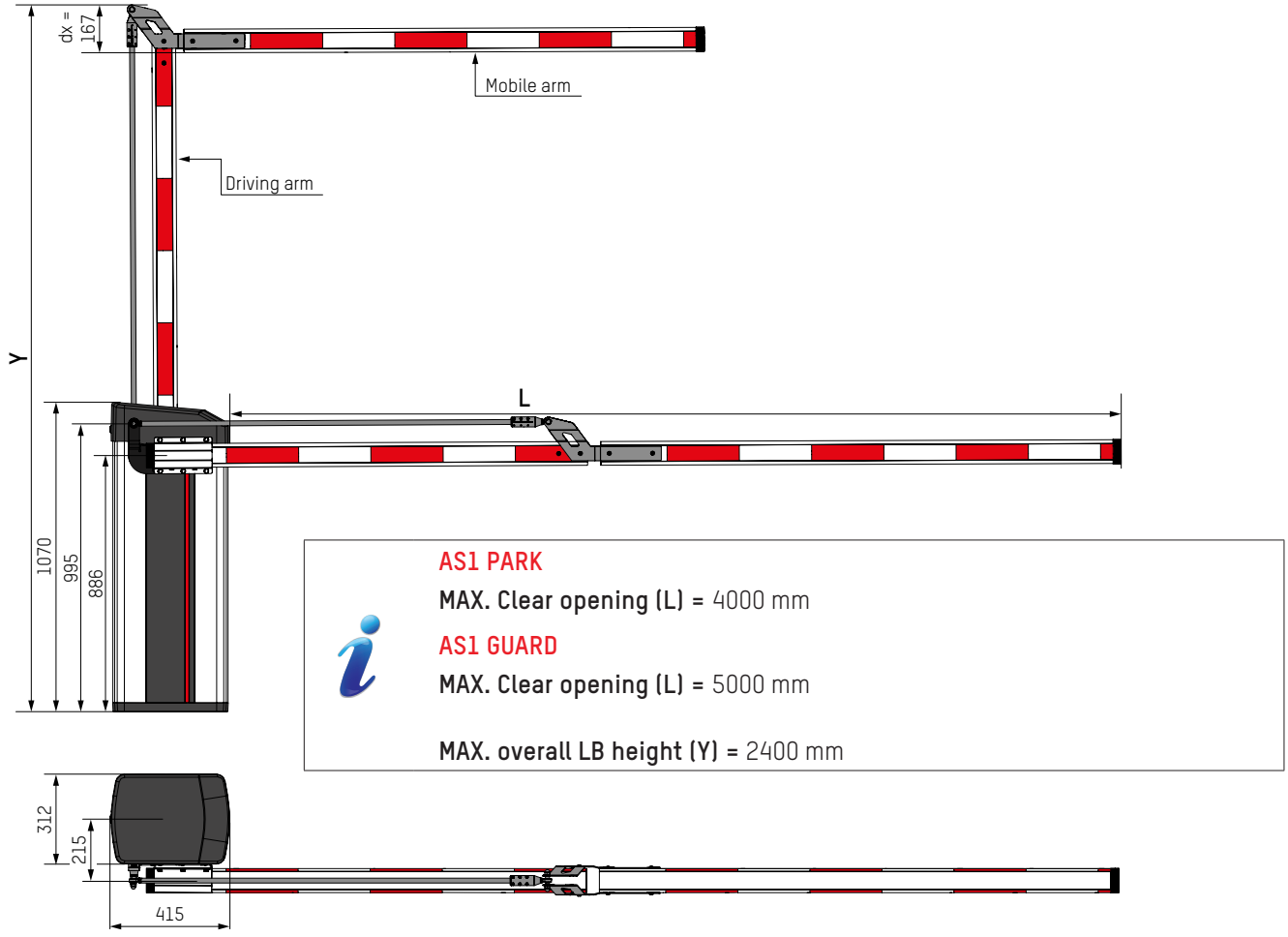
1 Supplied without any option on the boom. Incompatible with electromagnetic tip / traffic panel / swing-off.
2 Requires a swing-off device at the back side (not suitable with a front swing-off device).
3 Not suitable with folding rigid aluminum skirt / plastic folding fence.
4 Operating mode to be specified.
5 Antenna to set up.
6 Not suitable with folding fence / folding rigid skirt.
7 Limited to 3.5 m lane widths.
8 Not suitable with aluminium/plastic rigid folding fence / folding tip support.
9 Not suitable with aluminium/plastic rigid folding fence / folding tip support / ultrasonic detector / vandal-proof package.
10 Not suitable with folding tip support / vandal-proof package.
11 Requires a lateral articulated arm.
12 Not suitable with the vandal-proof package.
13 Not suitable with a rotating base.
14 This option is recommended for intensive operation at temperatures above 30°C.

OVERALL DIMENSIONS (MM)

AS1 PARK - AS1 GUARD: STRAIGHT ARM



AS1 PARK - AS1 GUARD: ARTICULATED ARM



AS1 PARK

MAX. Clear opening (L) = 4000 mm

AS1 GUARD

MAX. Clear opening (L) = 5000 mm

MAX. overall LB height (Y) = 2400 mm

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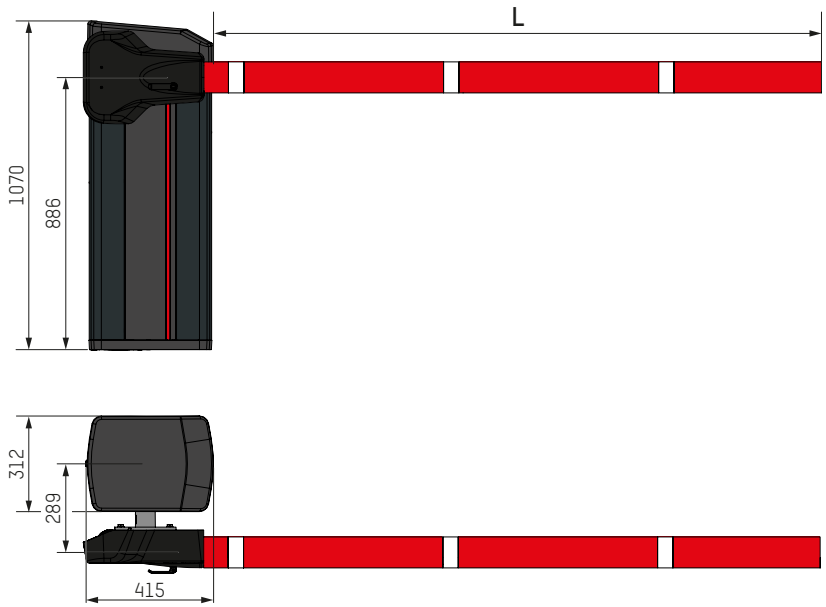
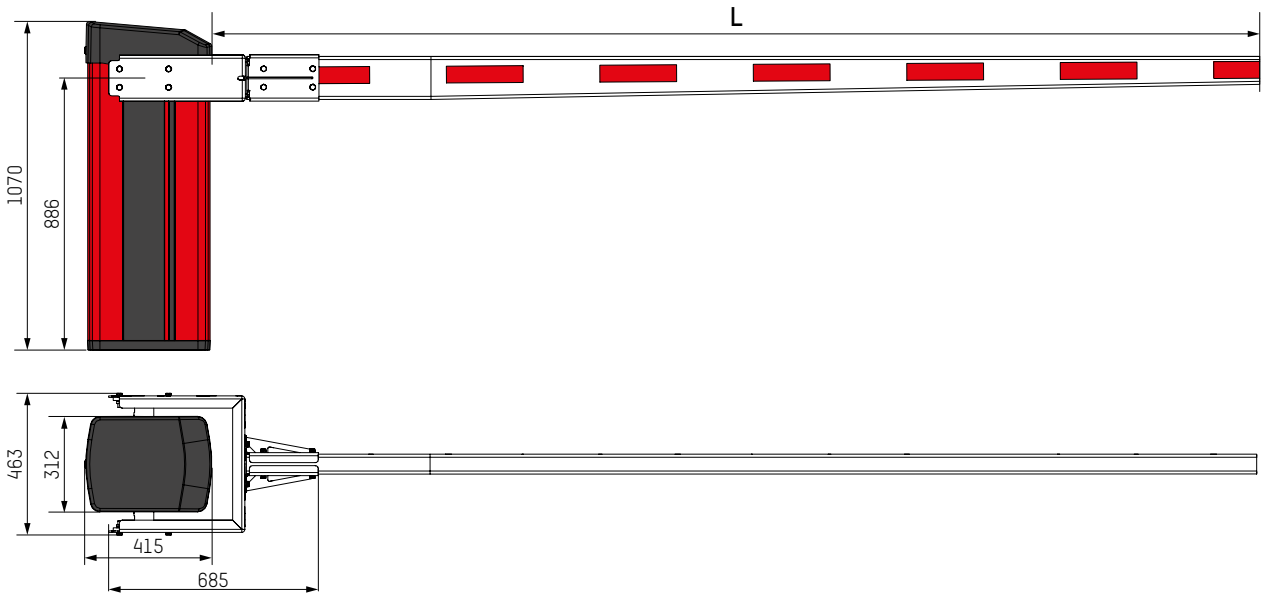
AS1 TOLL



AS1 FLOW



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